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EXAMINER	
SURYAWANSHI, SURESH	

ART UNIT	PAPER NUMBER
2115	

MAIL DATE	DELIVERY MODE
09/08/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/815,567	PAVER, NIGEL C.	
	Examiner	Art Unit	
	SURESH K. SURYAWANSHI	2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *6/20/08 amendments*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-24* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-24* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-24 are presented for examination.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 19-23 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

4. Claims 19-23 are not limited to tangible embodiments. In view of Applicant's disclosure, specification page 11, paragraphs [0029-0030], the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., ROMs, RAMs, floppy diskettes, CD-ROMs, etc.) and intangible embodiments (e.g., carrier wave). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 are rejected under 35 U.S.C. 102(e) as being anticipated by Wilson (US 2004/0117669 A1).

4. As per claim 1, Wilson discloses a method comprising:

monitoring one or more sensor outputs measuring a power consumption property of a chip [paragraphs 0006, 0018, 0020; monitoring a temperature sensor]; and

recording a time that at least one of the sensor outputs indicates an existence of the power consumption property at a predetermined value [paragraphs 0006, 0018, 0020, 0023; recording a time 'x'; Fig. 3].

5. As per claim 2, Wilson discloses that the power consumption property of the chip comprises temperature, and the temperature comprises a temperature range including one or more temperatures [Fig. 3 and 4].

6. As per claim 3, Wilson discloses that each sensor output corresponds to a temperature range, and indicates the existence of the one or more temperature measured at the corresponding sensor output [Fig. 3 and 4].

7. As per claim 4, Wilson discloses that the power consumption property of the chip comprises voltage drop, and the voltage drop range includes one or more voltage drops [paragraphs 0004, 0018, 0038, 0039; core voltage].

8. As per claim 5, Wilson discloses that each sensor output corresponds to a voltage drop range, and each sensor output indicates the existence of a voltage drop measured at the corresponding output [paragraphs 0004, 0018, 0038, 0039; core voltage].

9. Claims 6-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Gschwind et al (US Patent 6,948,082; hereinafter Gschwind).

10. As per claim 6, Gschwind discloses a method for analyzing operation of a chip executing an application, comprising:

monitoring one or more parts of the application [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly indicate monitoring one software application program to optimize it according to a temperature sensor outputs of a CPU];

obtaining event data from a sensor attached to the chip [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; obtaining event data from a temperature sensor connected to a CPU], the event data including one or more times that one or more sensor outputs indicates an existence of a power consumption property of the chip being at least a predetermined value [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; Fig. 4; col. 4, lines 63-65]; and

for at least one of the parts of the application, correlating the event data with the parts of the application [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly the software program application optimizing itself according to the event data received based on the temperature sensor].

11. As per claim 7, Gschwind discloses that the power consumption property comprises temperature [col. 4, lines 63-65; temperature measurement].

12. As per claim 8, Gschwind discloses that the power consumption property comprises voltage drop [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; inherent to the system as the power consumption directly or indirectly depends on the voltage supply].

13. As per claim 9, Gschwind discloses an apparatus for analyzing operation of a chip executing an application, comprising:

circuitry capable of:

monitoring one or more parts of the application [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly indicate monitoring one software application program to optimize it according to a temperature sensor outputs of a CPU];

obtaining event data from a sensor attached to the chip [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; obtaining event data from a temperature sensor connected to a CPU], the event data including one or more times that one or more sensor outputs indicates an existence of a power consumption property of the chip being at least a predetermined value [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; Fig. 4; col. 4, lines 63-65]; and

for at least one of the parts of the application, correlating the event data with the parts of the application [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly the software program application optimizing itself according to the event data received based on the temperature sensor].

14. As per claim 14, Gschwind discloses a system for analyzing operation of a chip executing an application, comprising:

circuitry on a first node, the circuitry connected to the chip and capable of:

monitoring one or more parts of the application [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly indicate monitoring one software application program to optimize it according to a temperature sensor outputs of a CPU];

obtaining event data from a sensor attached to the chip [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; obtaining event data from a temperature sensor connected to a CPU], the event data including one or more times that each of one or more sensor outputs indicates an existence of a power consumption property of the chip being at least a predetermined value [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; Fig. 4; col. 4, lines 63-65]; and

for at least one of the parts of the application, correlating the event data with the parts of the application [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly the software program application optimizing itself according to the event data received based on the temperature sensor]; and

a performance analyzer on a second node, the performance analyzer communicatively coupled to the circuitry on the first node to use the correlated information [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly the software program application optimizing itself according to the event data received based on the temperature sensor].

15. As per claim 19, Gschwind discloses

monitoring one or more parts of the instructions [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly indicate monitoring one software application program to optimize it according to a temperature sensor outputs of a CPU];

obtaining event data from a sensor attached to the machine [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; obtaining event data from a temperature sensor connected to a CPU], the event data including one or more times that each of one or more sensor outputs indicates an existence of a power consumption property of a chip being at least a predetermined value [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; Fig. 4; col. 4, lines 63-65]; and

for at least one of the parts of the instructions, correlating the event data with the parts of the instructions [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-

57; col. 9, lines 52-61; clearly the software program application optimizing itself according to the event data received based on the temperature sensor].

16. As per claim 24, Gschwind discloses a method for analyzing operation of a chip based on an executing application, the method comprising:

monitoring one or more portions of the executing application [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly indicate monitoring one software application program to optimize it according to a temperature sensor outputs of a CPU];

correlating the monitored one or more portions of the executing application with power consumption data obtained by a sensor on the chip [col. 3, lines 41-46; col. 4, lines 21-24, 41-46; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; clearly the software program application optimizing itself according to the event data received based on the temperature sensor]; and

storing data corresponding to the correlating [col. 4, lines 51-56; storing the temperature measurement].

17. As per claims 10, 15 and 20, Gschwind discloses that the power consumption property of the chip comprises temperatures, and the temperature comprises a temperature range including one or more temperatures [col. 4, lines 63-65; multiple measurement ranges].

18. As per claims 11, 16 and 21, Gschwind discloses that each sensor output corresponds to a temperature range, and indicates the existence of the one or more temperature measured at the corresponding sensor output [col. 4, lines 63-65; multiple measurement ranges].

19. As per claims 12, 17 and 22, Gschwind discloses that the power consumption property of the chip comprises voltage drop, and the voltage drop comprises a voltage drop range including one or more voltage drops [col. 3, lines 41-46; col. 4, lines 21-24, 41-46, 63-65; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; inherent to the system as the power consumption directly or indirectly depends on the voltage supply].

20. As per claims 13, 18 and 23, Gschwind discloses that each sensor output corresponds to a voltage drop range, and each sensor output indicates the existence of a voltage drop measured at the corresponding output [col. 3, lines 41-46; col. 4, lines 21-24, 41-46, 63-65; col. 5, lines 10-44; col. 8, lines 50-57; col. 9, lines 52-61; inherent to the system as the power consumption directly or indirectly depends on the voltage supply].

Response to Arguments

21. Applicant's arguments with respect to claims 1-24 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SURESH K. SURYAWANSHI whose telephone number is (571)272-3668. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas C. Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Suresh K Suryawanshi/
Primary Examiner, Art Unit 2115